

Aether



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hemera
analyzers

Gas Analyser





FTLS UV Gas Analyser

Powered by HEMERA

This uniquely rugged and simple design utilizes a high resolution spectroscopy analyzer which uses ultraviolet energy in different ranges for the determination of the concentrations and the characterisation of the gases.

APPLICATIONS

Major Applications:

- Natural gas
- LNG / LPG
- Upstream
- Downstream
- Chemical production
- Biogas
- Reformer gas
- Recycle gas
- Fuel gas monitoring
- Pipeline protection
- Food/Beverage applications
- Steel applications
- Pharmaceutical applications
- Safety applications
- and many more...

FEATURES

- Ranges vary from ppb to 100%
- +/-1% accuracy, +/-1% repeatability
- Modbus Serial communications,
- Dual Isolated 4–20 mA outputs
- Fast response 2 seconds
- Low detection limits
- No chemicals required
- No consumables required
- Multiple Gasses measurable

VALUE

The AETHER gas analyzer can measure H₂S, COS, CO, CO₂, CH₄, SO₂, CS₂, Mercaptans, NH₃, NO, NO₂, BTEX, Cl₂, NCl₃, Formaldehyde and Phenol in process streams. The unit has 4–20 mA outputs, alarms, plus trouble and fault alarm relays.





An external menu-driven interface allows operator functions without opening the cover. The AETHER gas analyzer displays the measured concentration(s) in user specified units and can produce a graph on the screen as well. Calibration is performed manually via the operator interface or automatically when connected to a calibration bottle with the optional auto calibration facility. The AETHER gas analyzer is available with a number of optional sample systems and accessories to handle various applications. Imac can assist you to develop appropriate sample system(s).

MEASURING PRINCIPLE

The measuring principle FTLS (Fourier Transform Least Squares) is based on light absorption according to Beer--Lambert's law.

- HIGH RESOLUTION SPECTROGRAPH
- XENON LAMP

LOWEST and HIGHEST RANGES Available for Different Gases (Excerpt)

In total, the Aeyher family of process gas analyzers can detect more than 200 gases. The following table is an excerpt, showing the most commonly used gases. Contact your Hemera / IMAC representative for information on configurations or gases that are not listed.

Gas Component		Standard Range*	
		Lowest Range	Highest Range
Sulfur Dioxide	SO2	0 – 10 ppm	0 – 10%
Ammonia	NH3	0 – 10 ppm	0 – 10%
Nitric Oxide	NO	0 – 100 ppm	0 – 100%
Nitrogen Dioxide	NO2	0 – 200 ppm	0 – 100%
Hydrogen Sulfide	H2S	0 – 5 ppm	0 – 10%
Carbonyl Sulfide	COS	0 – 10 ppm	0 – 10%
Methyl Mercaptan	CH3SH	0 – 10 ppm	0 – 10%
Formaldehyde	CH2O	0 – 200ppm	0 – 100%
Benzene	C6H6	0 – 10 ppm	0 – 2%
Toluene	C7H8	0 – 10 ppm	0 – 2%
Xylene	C8H10	0 – 10 ppm	0 – 2%
Carbon Monoxide	CO	0 – 10 ppm	0 – 100%
Carbon Dioxide	CO2	0 – 10 ppm	0 – 100%
Methane	CH4	0 – 10 ppm	0 – 100%

* Remarks: Typical values, please contact IMAC for more detailed information.

For ambient air monitoring and ASU applications different ranges available



SPECIFICATIONS

Analysis:	
Method	UV spectroscopy by FTLS 180nm-380nm * See remarks
Range	ppb level to 0-100% * See remarks
Accuracy	+/-1% of full scale
Repeatability	+/-1% of full scale
Linearity	+/-1% of full scale
Detection limit	+/-1% of full scale * See remarks
Response time	2 seconds
Sample:	
Temperature	0-190°C none condensing * See remarks
Flow	0-2 l/min
Pressure	0-0.5 Barg
Connections	3.2x6.4mm
Enclosure:	
Dimensions	400x300x200mm (HxWxD)
Weight	20kg
Materials	SS 316 / NEMA 4X
Protection	IP65
Power:	
Supply	90-264VAC / 50-60Hz
Consumption	100W
Output:	
Analog	4-20mA
Alarm	Failure relay
Interface	RS485 (Modbus)
Certifications:	
Approvals	CE / ICE 61010-1/ICE 61326 / ATEX (optional)

* Remarks: Typical values. Contact IMAC for detailed specifications

ORDERING INFORMATION:

Application
Range
Process conditions
Wall mounting or free standing frame
Power supply

REPRESENTED BY: